AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A machine for making a non-woven material by aerological means comprised of:

——a forming and conveying surface for the non-woven material, which is permeable to air,

——a dispersion chamber surmounting the forming and conveying surface,

——means of supplying the dispersion chamber with fibers intended to form the non-woven material,

——means, particularly vacuum means, located under the forming and conveying surface of the non-woven material that are capable of producing an air flow inside the dispersion chamber that allows the fibers inside the chamber to disperse and projects them onto the forming and conveying surface,

characterized by the fact that said vacuum means ~~(6)~~ are capable of producing a vacuum in a zone--called the vacuum zone ~~(9)~~--of the forming and conveying surface ~~(1)~~ of the non-woven material that extends under the dispersion chamber ~~(2)~~ and downstream from it, with a reduction in vacuum speed between the upstream and downstream parts of said zone ~~(9)~~.

2. (CURRENTLY AMENDED) The machine in Claim 1, characterized by the fact that since the downstream wall ~~(4)~~ of the vacuum chamber ~~(2)~~ is a plate, the lower edge ~~(12)~~ of said downstream wall ~~(4)~~ delimits--along with the upper end ~~(1a)~~ of the forming and conveying surface of the non-woven material ~~(1)~~--a space for passage whose height is greater than the thickness of the non-woven material ~~(13)~~ coming out of the dispersion chamber ~~(2)~~.

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3. (ORIGINAL) The machine in Claim 1, characterized by the fact that the lower edge of the downstream wall is comprised of a rotary cylinder that may be porous.

4. (CURRENTLY AMENDED) The machine in ~~one of~~ Claim~~s~~ 1~~ to 3~~, characterized by the fact that the vacuum means are comprised of a single vacuum tank in which the vacuum conditions vary from the upstream to the downstream part of the vacuum zone.

5. (CURRENTLY AMENDED) The machine in ~~one of~~ Claim~~s~~ 1~~ to 3~~, characterized by the fact that the vacuum means are comprised of a multi-stage vacuum tank, with each stage having distinct vacuum conditions.

6. (CURRENTLY AMENDED) The machine in Claim 5, characterized by the fact that a first stage ~~(10)~~ developing the highest vacuum speed (V1) is located under the dispersion chamber ~~(2)~~ in the primary section ~~(9c)~~ of the vacuum zone ~~(9)~~ extending up to the distance (d) perpendicular to the lower edge ~~(12)~~ of the downstream wall ~~(4)~~ of the dispersion chamber ~~(2)~~ and by the fact that at least one second stage ~~(14)~~, developing a vacuum speed V2 less than V1 extends downstream from the first stage ~~(10)~~ over a secondary section ~~(9d)~~ of the vacuum zone ~~(9)~~.

7. (CURRENTLY AMENDED) The machine in Claim 6, characterized by the fact that in the secondary section ~~(9d)~~ of the vacuum zone ~~(9)~~, it has only one second stage in which the vacuum speed (V2) decreases gradually, from the upstream to the downstream part of said secondary section ~~(9d)~~.

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8. (CURRENTLY AMENDED) The machine in Claim 6, characterized by the fact that in the secondary section ~~(9d)~~ of the vacuum zone ~~(9)~~, it has a plurality N of successive second stages ~~(14 to 18)~~.

9. (ORIGINAL) The machine in Claim 8, characterized by the fact that the vacuum speed (V3) is constant in each of these N second stages.

10. (CURRENTLY AMENDED) The machine in Claim 8, characterized by the fact that the vacuum speed (V4) in each of the N second stages ~~(14 to 18)~~ gradually decreases from the upstream part to the downstream part of said stage.

11. (CURRENTLY AMENDED) The machine in Claim 8, characterized by the fact that the vacuum speed (V5) is constant in some second stages ~~(15, 17)~~ and gradually decreases from upstream to downstream in other second stages ~~(14, 16, 18)~~.

12. (NEW) The machine in Claim 2, characterized by the fact that the vacuum means are comprised of a single vacuum tank in which the vacuum conditions vary from the upstream to the downstream part of the vacuum zone.

13. (NEW) The machine in Claim 3, characterized by the fact that the vacuum means are comprised of a single vacuum tank in which the vacuum conditions vary from the upstream to the downstream part of the vacuum zone.

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14. (NEW) The machine in Claim 2, characterized by the fact that the vacuum means are comprised of a multi-stage vacuum tank, with each stage having distinct vacuum conditions.

15. (NEW) The machine in Claim 3, characterized by the fact that the vacuum means are comprised of a multi-stage vacuum tank, with each stage having distinct vacuum conditions.

16. (NEW) The machine in Claim 14, characterized by the fact that a first stage developing the highest vacuum speed (V1) is located under the dispersion chamber in the primary section of the vacuum zone extending up to the distance (d) perpendicular to the lower edge of the downstream wall of the dispersion chamber and by the fact that at least one second stage, developing a vacuum speed V2 less than V1 extends downstream from the first stage over a secondary section of the vacuum zone.

17. (NEW) The machine in Claim 15, characterized by the fact that a first stage developing the highest vacuum speed (V1) is located under the dispersion chamber in the primary section of the vacuum zone extending up to the distance (d) perpendicular to the lower edge of the downstream wall of the dispersion chamber and by the fact that at least one second stage, developing a vacuum speed V2 less than V1 extends downstream from the first stage over a secondary section of the vacuum zone.

18. (NEW) The machine in Claim 13, characterized by the fact that:

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a first stage developing the highest vacuum speed (V1) is located under the dispersion chamber in the primary section of the vacuum zone extending up to the distance (d) perpendicular to the lower edge of the downstream wall of the dispersion chamber and by the fact that at least one second stage, developing a vacuum speed V2 less than V1 extends downstream from the first stage over a secondary section of the vacuum zone;

in the secondary section of the vacuum zone, it has only one second stage in which the vacuum speed (V2) decreases gradually, from the upstream to the downstream part of said secondary section;

in the secondary section of the vacuum zone, it has a plurality N of successive second stages;

the vacuum speed (V3) is characterized by being one of the group consisting of being constant in each of these N second stages;

each of the N second stages gradually decreasing from the upstream part to the downstream part of said stage; and constant in some second stages and gradually decreasing from upstream to downstream in other second stages.

19. (NEW) The machine in Claim 14, characterized by the fact that:

a first stage developing the highest vacuum speed (V1) is located under the dispersion chamber in the primary section of the vacuum zone extending up to the distance (d) perpendicular to the lower edge of the downstream wall of the dispersion chamber and by the fact that at least one second stage, developing a vacuum speed V2 less than V1 extends downstream

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from the first stage over a secondary section of the vacuum zone;

in the secondary section of the vacuum zone, it has only one second stage in which the vacuum speed (V2) decreases gradually, from the upstream to the downstream part of said secondary section;

in the secondary section of the vacuum zone, it has a plurality N of successive second stages;

the vacuum speed (V3) is characterized by being one of the group consisting of being constant in each of these N second stages;

each of the N second stages gradually decreasing from the upstream part to the downstream part of said stage; and constant in some second stages and gradually decreasing from upstream to downstream in other second stages.

20. (NEW) The machine in Claim 15, characterized by the fact that:

a first stage developing the highest vacuum speed (V1) is located under the dispersion chamber in the primary section of the vacuum zone extending up to the distance (d) perpendicular to the lower edge of the downstream wall of the dispersion chamber and by the fact that at least one second stage, developing a vacuum speed V2 less than V1 extends downstream from the first stage over a secondary section of the vacuum zone;

in the secondary section of the vacuum zone, it has only one second stage in which the vacuum speed (V2) decreases gradually, from the upstream to the downstream part of said secondary section;

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in the secondary section of the vacuum zone, it has a plurality N of successive second stages;

the vacuum speed (V3) is characterized by being one of the group consisting of being constant in each of these N second stages;

each of the N second stages gradually decreasing from the upstream part to the downstream part of said stage; and constant in some second stages and gradually decreasing from upstream to downstream in other second stages.

21. (NEW) The machine in Claim 16, characterized by the fact that:

in the secondary section of the vacuum zone, it has only one second stage in which the vacuum speed (V2) decreases gradually, from the upstream to the downstream part of said secondary section;

in the secondary section of the vacuum zone, it has a plurality N of successive second stages;

the vacuum speed (V3) is characterized by being one of the group consisting of being constant in each of these N second stages;

each of the N second stages gradually decreasing from the upstream part to the downstream part of said stage; and constant in some second stages and gradually decreasing from upstream to downstream in other second stages.

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GAGNEBIN & LEBOVICI LLP
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FAX. (617) 451-0313